Arizona Department of Health Services
Bureau of EMS & Trauma System / Bureau of Public Health Statistics
Trauma Registry Users Group (TRUG)

Trauma Registry Users Group (TRUG) Meeting Minutes

Wednesday, January 17, 2008 9:00 a.m. – noon
Location: Arizona Dept. of Health Services
150 North 18th Avenue Phoenix AZ 85007
5th Floor – 540A Conference Room
Contact: Anita Ray Ng 602-542-1245 raya@azdhs.gov

Attendees:

Bill Ashland	Carol Bailey	Diana Bencomo	Paul Bowlby	Debra Brown
Terry Burns	Vicki Conditt	Lillian Duncan	Pam Goslar	Starre Haney
Karen Helmer	Julie Herrera	Valerie Hill	Ann Hoover	Xan Hummel
Rose Johnson	Tara Kennedy	Kelley Lewellyn	Alice Magno	Cynthia Marks
Beth Mlenar	Melissa Moyer	Donna Quay	Angela Parker	Anita Ray Ng
Genia Sims	Philomene Spadafore	Sherry Staffen	Erzsebet Szabo	Linda Tuck
Veronica Videa	David Villa	Cristina Wong	Georgia A. Yee	

A) TRUG member introductions – There were many new faces at the meeting. Welcome!

B) Thank you to all of our TRUG members for such great participation and dedication!

C) Education / Training
1) ICD-9-CM Injury Diagnoses / E-code workshop – Training is postponed. More information to follow.
2) Trauma One Training – Plan to schedule beginning Trauma One training in February. New report writer is not available yet. Advanced training date is pending.
3) Collector Training – Flagstaff will keep Trauma Registry Manager posted on training needs.

D) Status of 2008 database changes – Trauma One and Collector
1) University Medical Center, John C Lincoln, and Phoenix Children's have upgraded systems and are working out glitches. St. Joseph's, Maricopa Medical Center, and the ASTR system are in process of upgrade. Per Lancet, all other Trauma One reporting hospitals are scheduled for upgrade the week of Jan 21st. Flagstaff will send additional system information to Digital Innovation.
2) At this point in time, ADHS has a contract to pay for reporting hospital's software license, annual technical support fee, and 2008 database upgrade. Any data link interfacing, data conversion, hospital-specific mapping, or changes to non-ASTR data elements will be the financial responsibility of your facility. Hospitals are responsible for updating any special hospital-specific export instructions, if any are in place.
3) Important Reminder: Your hospital staff will be responsible for reviewing your updated system to ensure the state required data elements match the specifications of the ASTR 2008 data dictionary. Please ensure that your new system contains ALL of the state required fields, that field calculations are correct, and that Not Applicable autofills are set up. Trauma Registry Manager is available by phone or email if you need any assistance. Please do not hesitate to ask questions!
4) After the first quarter 2008 data files are received (due July 1), Trauma Registry Manager will run blank field and quality check reports to assess if systems are exporting/importing the new 2008 data fields correctly. TRUG will meet a few weeks after the July 1 deadline to go over the reports.

E) Quarterly Reports to ASTR Reporting Hospitals

1) Quarterly Data Validation Report – After the 2008 changes are complete, ASTR will work with Lancet to create a data validation tool to be run on 2008 hospital data before it is submitted to ASTR. Validation tool will again be run by ASTR to confirm that the quarterly data passes all quality checks. For Collector users, data may need to be submitted to ASTR for validation.
a) Blank required field check in new system – Lancet is supposed to update the data completeness check for individual records (at the bottom of the discharge tab). The data validator will serve as the method for checking more than one 2008 record for blanks.

2) What type of ASTR quarterly report would be useful for your facility? ADHS is required to submit a quarterly report to submitting hospitals. ADHS is open to suggestion on what type of quarterly report hospitals would find useful. Individual hospital data can only be released to the facility who submitted the data. Per confidentiality statutes, only statewide aggregate trauma data can be released to other hospitals and the public. Please email your report suggestions to Anita.

F) 2008 Data Dictionary will be finalized after this meeting's discussion. The final 2008 data dictionary will be emailed to TRUG once the final ASTR system information is obtained from the software vendor.

G) Plan for 2008 trauma registry user manual - A user manual will be created with detailed instructions for registrars. The manual will also outline any differences between the state system and NTDS standards. Please email Anita any questions you think would be helpful to include in the user manual.

H) 2008 Trauma Patient Inclusion Criteria and System Access field – Refer to handout # 1

1) The new 2008 Trauma Patient Inclusion Definition was reviewed again with TRUG members.
2) The 2008 System Access field refers to the 3 main categories of the Trauma Patient Inclusion Definition and will be important in assessing the new inclusion criteria. A patient may meet 1, 2 or all 3 criteria. It is very important registrars select ALL that apply.
3) Question from TRUG member: Does an in-hospital trauma physician consult (no activation) meet the #2 criteria? If the consult does not lead to the activation of a trauma team, patient would not meet the #2 criteria. However, if patient meets criteria #3, that patient would be included in the registry.
4) The trauma patient definition is new this year and was established by the Trauma Rulemaking Committee. If you come across any patients that don't meet the criteria but appear to be trauma patients, please notify the Trauma Registry Manager. Information can be presented to STAB to ensure the new criteria adequate.

I) 2008 fields that need further TRUG discussion:

1) Procedures – Which procedures to collect? – Refer to handout #2A. Update Procedure Location picklist? – Refer to handout #2B
   a) The NTDS definition of "Operative or essential procedures" was added to the data dictionary. Registrars should follow NTDS instructions regarding which procedure codes are to be entered in the Hospital Procedure field.
   b) After TRUG discussion, it was decided that both Referring Facility and Reporting Facility procedures will continue to be captured in the Hospital Procedure field. Only Reporting Facility procedures will be exported to NTDB. EMS/prehospital procedures are not captured in the Hospital Procedure field.
   c) Procedure Location picklist updates: Registrar will select REFERRING FACILITY for any procedures that are performed in the referring hospital, regardless of the location in the referring hospital. All other picklist options pertain to locations at the reporting hospital. "Enroute to Referring Facility" will be removed from picklist. "Rehab Facility" will be removed from picklist. Long text for Medical Surgery will be updated to "Medical Surgical / Floor". Long text for "Other" will be replaced with "Other Location in Your Hospital". Picklist update will be sent out by Trauma Registry Manager.

2) Alcohol Use Indicator picklist – Refer to handout #3
   a) NTDS has been notified of a problem with the national Alcohol Use Indicator picklist. There is no way to indicate if a patient was suspected of drinking alcohol but was not tested, or if the patient reported drinking alcohol but was not tested. Pending NTDS response, TRUG members decided that "Suspected use, not tested" and "Patient reported use, not tested" will be added to the state picklist. Picklist update will be sent by Trauma Registry Manager.
   b) Discussion was held regarding inconclusive Blood Alcohol Content (BAC) test levels. Final TRUG decision: If lab results come back as <10 mg/dL (or if the lab results indicate an alcohol level too low to report an actual value), the registrar will enter 0 for the BAC field. Under the Alcohol Use Indicator field, registrar will select "No, confirmed by test."
   c) The legal alcohol limit for AZ is .08 (entered in database as BAC 80 mg/dL.) "Trace levels" is a term from the NTDS Alcohol Use picklist and refers to alcohol levels below the treating institution's legal state limit. Based on TRUG discussion mentioned above, the "trace levels" option will be selected if BAC levels are >= 10 mg/dL and < 80 mg/dL. This information will be added to the user manual.

3) Drug Use Indicator picklist – Refer to handout #4

a) TRUG discussion was held regarding Drug Use fields. Only drugs used by the patient will be entered in this field. Drugs given by EMS or by hospital staff do NOT apply to the state required drug use fields. It was pointed out by TRUG member that it can be difficult to determine if prescription drug use was legal or illegal. Other TRUG member commented that physician notes usually indicate somewhere in chart whether or not patient was on prescription medication prior to hospitalization. If legal or illegal prescription use cannot be determined, registrar will default to legal use prescription.

b) TRUG discussion was also held on whether databases should be redesigned to require the identification of legal or illegal use for each individual drug that was detected. Changing the database could provide more information, but it would also increase registrar and software vendor workload. For now, ADHS will leave the current requirements in place. This issue can be re-addressed for 2009, if it is determined that critical drug use information is not being captured.

J) Entering both 2007 and 2008 data in your updated system

1) If a picklist was changed from 2007 to 2008, the system will open up to the 2008 choices with a subpicklist containing the 2007 choices. If a picklist field did not change in 2008 or if the field is new in 2008, the field will not contain a 2007 subpicklist.
2) If a record has an ED Arrival Year of 2007, you must select a valid 2007 picklist value. If a record has an ED Arrival Year of 2008 you must select a valid 2008 picklist value.
3) New 2008 data fields are not required for final quarter 2007 records.

K) 2007 and 2008 data reporting issues to be aware of

1) In order to keep both 2007 and 2008 picklist choices within the same drop down menu and still be able to run reports on different long text values, the codes for several picklist values had to be changed in 2008. **When you are running reports using data from multiple years, it is very important to take out the data dictionary for each year and make sure that your report accounts for all of the codes that apply. Reporting data from multiple ED Arrival years will require special attention to 2008 changes.**
2) If your hospital had a different calculation for a 2007 field than what is listed in the 2008 data dictionary, your upgraded system will start calculating based on the 2008 method. If you need your 2007 data to match a prior calculation for 2007 reporting purposes, the registrar will have to manually enter the value.

L) 2008 ASTR Data Element and System Changes Review – Refer to handouts #5A and #5B

1) A document highlighting important 2008 changes was emailed to TRUG and has been provided in today's packets. It is very important registrars understand the changes indicated in this document. If you do not understand something, please contact the Trauma Registry Manager before you type in your 2008 records.
2) An additional document was provided in today's packets listing: new fields for 2008, picklist changes for 2008, diagnosis field changes for 2008, and other important 2008 changes.
3) 2008 changes discussed:
   a) ED/Hospital Arrival Date refers to the date of patient's first arrival at your hospital. The value will display on the demographic and ED sections, and should be the same for both fields. This field must be entered for all records. **When exporting records to ASTR, always select ED/Hospital Arrival Date with your date range, NOT Admit Date.**
   b) AGE: If DOB is unknown, enter Not Documented for DOB and then enter a best estimate for Age. Units of Age picklist has been updated to match NTDS. TRUG members recommended instructions on when to use each Age Unit option. Instructions will be added to data dictionary.
   c) Country codes are now in 2 digit format in the new system, instead of 3 digits.
   d) PREHOSPITAL: The prehospital page has the most changes. Please contact Trauma Registry Manager if you need assistance with this page.
      (i) Transport Type (new field): Each leg of transport/EMS care is entered separately and the Transport Type field will indicate which leg of transport pertains to the arrival of the patient at your facility. Any other transport or first responder care should be entered with the OTHER option. Please enter in order of occurrence. The Transport Type field was created to facilitate NTDB export. Every record should have ONE leg of transport pertaining to the arrival of patient at your hospital, even if there was no EMS involvement.
      (ii) If a patient did not receive any prehospital EMS care, there are fields that are still required. Please enter required fields, and for EMS Agency, select "No EMS Care" from the picklist. Doing so should autofill Not Applicable (*NA) for the remaining prehospital fields that do not apply.
      (iii) Per NTDS, separate prehospital Dates/Times are required. Refer to the software hotkeys to copy the same date into multiple fields. Be careful when the date switches over at midnight.

(iv) TRIAGE CRITERIA: Triage Criteria list was updated to the ACS "green book" EMS guidelines. Arizona does not have a mandatory statewide EMS protocol.
   (a) In the 2008 triage picklist, there is a selection for "EMS provider judgment" and "Other EMS Protocol not on ACS Field Triage Decision Scheme". Please use these selections if EMS triage criteria are not in the picklist. TRUG members expressed concern regarding potential loss of information without a picklist option for other types of high risk auto crashes. ADHS discussed this concern after the meeting. Picklist update will be sent out.
   (b) Question was raised on definition of "vehicle telemetry data". Anita will investigate.

e) REFERRING FACILITY: The definition of a first and second referring facility has changed. Please enter the remainder of your 2007 records using the OLD definition and then start with the new definition for 2008 records. In 2008, the First Referring Facility will always be the hospital that transferred the patient to your facility. Second Referring Facility will only apply if patient was cared for by TWO acute care hospitals before arrival at your hospital.
   (i) The Referring Facility field should have two Not Applicable autofills to help with data entry. If you enter No for Interfacility Transport, the entire page will autofill *NA. If you enter a first referring transfer and then Not Applicable for Date of Arrival at Second Referring, all second referring facility fields and 2nd referring vitals should autofill to *NA.

M) Further questions or concerns?
1) UMC and John C Lincoln indicated they do not have the new AIS 2005 picklist. Anita emailed Leon after the meeting to check on the status.
2) TRUG member indicated that some patients come to ED and are treated in OR, but patient is never admitted. For the inpatient admission status field, patient would be considered as treated in ED and released. Inpatient Admit Date and Inpatient Hospital Discharge Date would be marked as Not Applicable.
3) After the meeting, TRUG member raised question on the NTDS Airbag Deployment picklist and the inability to indicate that an airbag deployed when airbag type is unknown. ADHS discussed issue and picklist update will be sent out.

N) Tentative TRUG meeting schedule. Please mark your calendars:
Tuesday, 3/25/08 - 9:30 a.m. – noon
Tuesday, 7/22/08 - 9:30 a.m. – noon
Thursday 10/23/08 - 9:30 a.m. – noon

ARIZONA STATE TRAUMA REGISTRY (ASTR)

TRAUMA PATIENT INCLUSION DEFINITION*

(Effective for trauma records with ED/Hospital Arrival Dates Jan. 1, 2008 forward)

1. A patient with injury or suspected injury who is triaged from a scene to a trauma center or ED based upon the responding EMS provider's trauma triage protocol; **OR**

2. A patient with injury or suspected injury for whom a trauma team activation occurs; **OR**

3. A patient with injury who:

A. Is admitted as a result of the injury **OR** who dies as a result of the injury **AND**

B. Has an ICD-9-CM N-code within categories 800 through 959 **AND**

C. Does not **ONLY** have:

a) Late effects of injury or another external cause:
ICD-9-CM N-code within categories 905 through 909

b) A superficial injury or contusion:
ICD-9-CM N-code within categories 910 through 924

c) Effects of a foreign body entering through an orifice:
ICD-9-CM N-code within categories 930 through 939

d) An isolated femoral neck fracture from a same-level fall:
ICD-9-CM N-code within category 820 **AND** ICD-9-CM E-code within category E885 or E886

e) An isolated distal extremity fracture from a same-level fall:
ICD-9-CM N-code within categories 813 through 817 or within categories 823 through 826 **AND** ICD-9-CM E-code within category E885 or E886

f) An isolated burn:
ICD-9-CM N-code within categories 940 through 949

*Inclusion criteria effective for records with ED/Hospital Arrival Date of January 1, 2008 forward.
"N-code" refers to the nature/diagnosis of injury, as coded according to the ICD-9-CM.

TRUG MTG HANDOUT #1 (Page 1 Inclusion Criteria / Page 2 System Access Field)

SYSTEM ACCESS Picklist

This field directly refers to the 3 main categories of the ASTR Trauma Patient Inclusion Criteria – Please refer to # 1, 2 and 3 in RED on previous page (page 1).

***Each patient may meet 1, 2 or all 3 inclusion criteria.**

IT IS VERY IMPORTANT TO SELECT ALL CRITERIA THAT APPLY!

1	System Access (Inclusion Criteria)	EMS_TRIAGE	**Triaged from Scene to Trauma Ctr/ED per EMS Trauma Protocol**	Indicates which inclusion criteria this patient met to be included in the ASTR registry as a trauma patient.
2	*(picklist update 2008)*	ACTIVATION	**Trauma Team Activation**	This multiple entry picklist will be used to assess the ASTR inclusion criteria. It is very important the registrar enter all criteria that apply. A patient may meet one, two or all three of the inclusion criteria on this picklist.
3		ICD9_REVIEW	**Admitted or Died and met ASTR ICD-9-CM Inclusion Codes**	Not Documented and Not Applicable should not be used. Every patient in the ASTR registry should meet at least one of the inclusion criteria.

TRUG MTG HANDOUT #2A

NTDS HOSPITAL PROCEDURE INFORMATION:

HP_01

HOSPITAL PROCEDURES

Data Format [combo] multiple-choice ***National Element***

Definition

Operative or essential procedures conducted during hospital stay.

XSD Data Type *xs:integer* **XSD Element / Domain (Simple Type)** *HospitaProcedures*
Multiple Entry Configuration Yes, max 200 **Accepts Null Value** Yes, common null values
Required in XSD Yes

Field Values

- Major and minor procedure (ICD-9-CM) IP codes.
- The maximum number of procedures that may be reported for a patient is 200.

Additional Information

- Operative and/or essential procedures is defined as procedures performed in the Operating Room, Emergency Department, or Intensive Care Unit that were essential to the diagnoses, stabilization, or treatment of the patient's specific injuries.
- Repeated diagnostic procedures (e.g., repeated CT scan) should not be recorded (record only the first procedure).

Data Source Hierarchy

1. Operative Reports
2. ER and ICU Records
3. Trauma Flow Sheet
4. Anesthesia Record
5. Billing Sheet / Medical Records Coding Summary Sheet
6. Hospital Discharge Summary

Uses

- Allows data to be used to characterize procedures used to treat specific injury types.

Data Collection

- Hospital records or electronically through linkage with the EMS/medical record.

Other Associated Elements

- Procedure Date
- Procedure Time

TRUG MTG HANDOUT #2B

PROCEDURE LOCATION

Current ASTR Procedure Location Definition:
The location at which each ICD-9-CM procedure was performed (in your ED or a referring hospital).

Current ASTR Procedure Location picklist:

(Long Text)	(System Code)	
ED	ED	
OR	OR	
ICU	ICU	
Medical Surgery	MED	
Stepdown Unit	STE	
Radiology	RAD	
Nuclear Medicine	NUC	
Burn Unit	BRN	
Rehab Facility	REH	(not used in 2007 data)
Minor Surgery Unit	MSR	
Special Procedures Unit	SPU	
Referring Facility	REF	
Enroute from Referring Facility	ERF	
Cardio Diagnostics	CAR	
Cath Lab	CAT	
PACU	PAC	
Labor & Delivery	L&D	
Other	OTH	

ASTR Procedure Location Data	
ED Arrival Dates 1/1/07-9/30/07	**Frequency**
ED	21129
OR	17267
RADIOLOGY	6358
ICU	4891
(NOT APPLICABLE)	4715
OTHER	722
(BLANK)	640
REFERRING FACILITY	371
SPECIAL PROCEDURES UNIT	354
MEDICAL SURGERY	338
(NOT DOCUMENTED)	203
PRE-HOSPITAL (removed from picklist Feb 07)	125
MINOR SURGERY UNIT	71
CATH LAB	70
NUCLEAR MEDICINE	69
STEPDOWN UNIT	64
TRA (invalid entry)	48
CARDIO DIAGNOSTICS	29
BURN UNIT	21
LABOR & DELIVERY	16
PACU	8
ENROUTE FROM REFERRING FACILITY	7
FLD (invalid entry)	5
SCENE (removed from picklist Feb 07)	3
Total	**57524**

TRUG MTG HANDOUT #3

ALCOHOL USE INDICATOR - NTDS PICKLIST ISSUE

There are at least 2 possible scenarios that do not fit into any of the standard NTDS categories:

1. Patient is suspected by EMS or hospital staff to have used alcohol, but no testing was performed.

2. Patient admitted to drinking, but no testing was performed.

Taken from NTDS Data Dictionary v. 1.2:

ED_15

ALCOHOL USE INDICATOR

Data Format [combo] single-choice ***National Element***

Definition

Use of alcohol by the patient.

XSD Data Type *xs:integer* **XSD Element / Domain (Simple Type)** *AlcoholUseIndicators*
Multiple Entry Configuration No **Accepts Null Value** Yes, common null values
Required in XSD Yes

Field Values

1 No (not suspected)

2 No (confirmed by test)

3 Yes (confirmed by test [trace levels])

4 Yes (confirmed by test [beyond legal limit])

Additional Information

- Blood alcohol concentration (BAC) may be documented at any facility (or setting) treating this patient event.
- "Trace levels" is defined as any alcohol level below the legal limit, but not zero.
- "Beyond legal limit" is defined as a blood alcohol concentration above the legal limit for the state in which the treating institution is located.

TRUG MTG HANDOUT #4

DRUG USE INDICATOR – Important Notes on NTDS / ASTR choices

Per NTDS definition, if a patient illegally uses a prescription drug, then the drug use would be considered as "illegal drug use". The "prescription drug" option refers to legal prescription use.

To make the NTDS definition more clear during the data entry process, the ASTR picklist was worded slightly different than the NTDS wording, but the categories are still the same:

- ASTR Drug Use Indicator picklist:

NONE	No, not suspected
SUSPECTED	No, confirmed by test
YES_PRESCRPTN	Yes , confirmed by test, legal use prescription drug
YES_ILLEGAL	Yes, confirmed illegal use drug or illegal use prescription

- NTDS Drug Use Indicator Information (from NTDS Data Dictionary 1.2):

DRUG USE INDICATOR

Field Values

1 No (not suspected)

2 No (confirmed by test)

3 Yes (confirmed by test [prescription drug])

4 Yes (confirmed by test [illegal use drug])

Additional Information

- Drug use may be documented at any facility (or setting) treating this patient event.
- "Illegal use drug" includes illegal use of prescription drugs.

TRUG Question: If test results reveal prescription drug use, but it is unknown if use is legal or illegal, how should it be coded?

TRUG MTG HANDOUT #5B

Arizona State Trauma Registry (ASTR) – Important Changes for 2008

The following are important changes to pay special attention to in the new hospital systems:

- Your upgraded database should contain all of the data elements that are listed on the new 2008 data dictionary (except any ASTR-only items that are shaded in gray.)

- New 2008 data elements are not required to be entered for 2007 records. If want to enter the new fields for 2007 data you may do so, but the new data fields will not be used for ASTR 2007 reporting.

- Reporting hospitals should update their 2008 State required fields to match the ASTR required picklist values, calculations, and field constraints. If your hospital needs to track additional information or if you need a different calculation for that field, please ask the software vendor to create you a separate field. Future system changes (and picklist updates) will be much easier if we all have the same State required fields to work with.

- When you receive a new system, your picklist values (drop down menus) should be updated. Picklists that were changed in 2008 will open up and display the 2008 choices, with a subpicklist labeled "2007". When you open up the 2007 subpicklist, the 2007 picklist choices will be displayed. New picklists (or any old picklists that did not change) will not contain a 2007 drop down menu. After we complete the 2007 data entry and quality checks, we will remove the ability to select from the 2007 picklists.

- When entering a record with an ED Arrival Date in 2007 the user should select ONLY from the 2007 picklist choices. For 2008 ED Arrival Dates, the user should select ONLY from the 2008 choices.

- ED/Hospital Arrival Date will be found on the main demographic page (used to calculate age) and also on the ED/Trauma page (used to calculate ED LOS). Entry of ED/Hospital Arrival Date is mandatory for all records. Not Documented and Not Applicable should not be used and this field should not be left BLANK. **When exporting data to ASTR, always select ED/Hospital Arrival Date with the date range, not Admit Date.**

- The Units of Age picklist was changed to match the NTDS format. "Years Estimated", "Months Estimated" and "Days Estimated" were removed from the picklist and "Hours" was added. Patient Age will autocalculate in the new system based on ED/Hospital Arrival Date and Date of Birth. If patient's Date of Birth is unknown, enter Not Documented for DOB and then enter a best approximation of patient's age. Not Documented and Not Applicable should not be used for Age.

- Country codes were changed from a 3 digit format to a 2 digit format to match the standardized ISO codes used in the Hospital Discharge Data ("US" instead of "USA" for United States and "MX" instead of "MEX" for Mexico). Your 2007 data may contain both types of country codes. The software vendor can convert your final 2007 data to the 3 digit format if this causes a problem with your hospital reports.

- Data entry of prehospital information has been changed for 2008 ED Arrival Dates:

    - The System Access field has been changed to indicate which inclusion criteria the patient met in order to be included in the ASTR registry as a trauma patient. This field is going to be very important in assessing the new ASTR inclusion critieria, and the registrar should enter all criteria that apply.

    - Each leg of prehospital transport will be entered separately, and transports should be entered in the order that they occurred. The term "prehospital" refers to any transport or EMS care that occurred before the patient arrived at your hospital.

    - There is a new prehospital field (with picklist) labeled "Transport Type". Every record must have at least one transport leg that pertains to the arrival of the patient at your facility (the reporting hospital). This field will be used as a marker to determine which prehospital data to export to NTDB.

    - The new Transport Agency field opens up to 3 options: No EMS Care, EMS Transporter picklist, and EMS 1st Response Non-Transport picklist. The agency name should be selected from the appropriate transport or non-transport picklist. Please refer to the ASTR Data Dictionary notes regarding how to enter fire department transports for fire agencies that are not on the EMS Transporter picklist.

    - Date fields were added to correspond with EMS time fields, per NTDS requirements. The user can use database "hot keys" to copy the previous date, as applicable.

- Data entry of referring facility information has been changed for 2008 ED Arrival Dates:

    - In 2007 data, the First Referring Hospital refers to the very first hospital that cared for the patient for that injury event. The Second Referring Hospital refers to a second hospital that cared for the patient before arrival at the reporting hospital. Entering data in this way made it difficult (for reporting purposes) to determine which hospital transported the patient into the reporting hospital. That is why changes were made for 2008.

    - In 2008 data, the First Referring Hospital will always be the hospital that transferred the patient TO YOUR FACILITY. The Second Referring Hospital will be any other hospital that cared for the patient before arrival at the First Referring Hospital.

    - Note: It is assumed that not many patients will be cared for at a Second Referring Hospital, but if two hospitals treat the patient before arrival at your hospital, it is very important that you document this information. The State Trauma Advisory Board has asked for special reports on trauma patients that had 2 interfacility transfers.

    - Referring Facility data entry example (2007 and 2008 differences):

- Referring Hospital example: A U.S. patient was taken directly from an injury scene in Mexico to a hospital in Mexico. The patient was then transferred to Yuma Regional Medical Center. Following care in the ED at Yuma Regional, the patient was transferred to St. Joseph's Hospital in Phoenix. Both Yuma and St. Joseph's reported this record to ASTR, but the referring hospital information will be different:

For 2007 Referring Hospital data (based on example):

Hospital reporting data: Yuma Regional
2007 First Referring Hospital: Mexico Facility
2007 Second Referring Hospital: Not Applicable

Hospital reporting data: St. Joseph's Hospital
2007 First Referring Hospital: Mexico Facility
2007 Second Referring Hospital: Yuma Regional

For 2008 Referring Hospital data (based on example):

Hospital reporting data: Yuma Regional
2008 First Referring Hospital: Mexico Facility
2008 Second Referring Hospital: Not Applicable

Hospital reporting data: St. Joseph's Hospital
2008 First Referring Hospital: Yuma Regional
2008 Second Referring Hospital: Mexico Facility

- Entering No in the "Interfacility Transfer?" field should autofill Not Applicable into all of the First and Second Referring Hospital fields.

- A patient may have been treated in only one acute care hospital prior to arrival at your facility. Entering Not Applicable for the Date of Arrival in the Second Referring Facility field should autofill Not Applicable into all of the remaining Second Referring Hospital fields.

- For ASTR reporting purposes, the required Hospital and EMS Destination picklists for 2008 will include acute care hospitals and NOT rehab facilities, psych facilities, nursing homes, etc. If you need to track the name of the non-acute care facilities that you transfer patients to, please capture that information in a separate destination field.

- AIS 2005 6 digit injury identifiers are only required from designated Level I facilities. Level I facilities will need to tell the software vendor when they would like their AIS 2005 update. Level I facilities must use the AIS 2005 version when entering diagnosis information for patients with 2008 ED arrival dates.

- ICD-9-CM final diagnosis codes are required from all reporting hospitals. The new systems now have separate body regions, severity values, and ISS scores for the ICD-9-CM and AIS 2005 codes. Probability of survival will be calculated based on the ICD-9 codes entered, since these codes will be received from all ASTR reporting hospitals.

- The co-morbidity and complication picklists have been changed in 2008 to match the NTDS format. The definitions of these conditions can be found in the NTDS data dictionary. Definitions will also be added to the ASTR user manual. If you need to track additional complications than what ASTR requires, please do so in a separate field.

TRUG MTG HANDOUT #5A

2008 ASTR IMPORTANT CHANGES

38 NEW ASTR REQUIRED FIELDS:

Admission Status at Reporting Facility
Alternate Home Residence (if no ZIP)
Country of Injury Incident Location
Additional ICD-9-CM E-code Injury Descriptor
Child Specific Restraint Details
Airbag Deployment Details
Patient's Occupational Industry
Patient's Occupation
Transport Type
Transport Mode(s)
Transported From (ORIGIN)
Date EMS Provider Left for Scene
Date EMS Provider Arrived on Scene
Date of EMS Patient Contact
Date EMS Departed Scene
Date of Arrival at EMS Destination
Total EMS Response Time (minutes)
Total EMS Time (minutes)
Initial Field Pulse Rate
Initial Field Oxygen Saturation
Interfacility Transfer?
ED Discharge Destination Hospital
ED Discharge Transport Agency
ED Transfer Reason
ED/Hospital Initial Pulse Rate
ED/Hospital Initial Respiratory Assistance
ED/Hospital Initial Oxygen Saturation
ED/Hospital Initial Supplemental Oxygen
ED/Hospital Initial GCS Qualifiers
Alcohol Use Indicator
Total Ventilator Days
Hospital (Inpatient) Discharge Time
Total Hospital Length of Stay (ED + Admission)
Hospital Discharge Destination Hospital
Hospital Discharge Transport Agency
Hospital Discharge Transfer Reason
ED/Hospital Procedure Start Date
ED/Hospital Procedure Start Time

UPDATES TO REQUIRED PICKLIST FIELDS:

Units of Age
Gender
Race
Ethnicity
City of Residence
County of Residence
State of Residence
Country of Residence
Co-Morbid Conditions (Pre-Existing Factors)
Injury Location ICD-9-CM E-code (E849)
City of Injury Incident Location
County of Injury Incident Location
State of Injury Incident Location

Trauma Type
Protective Devices
Patient Position in Vehicle
Work-Related?
System Access (Inclusion Criteria)
Triage Criteria
Transported From (HOSPITAL)
EMS Agency
Run Sheet Available?
EMS Destination
Intubation Status at Time of Field Vitals
Initial Field GCS - Verbal Response
Initial Field GCS - Motor Response
Field Paralytic Agent in Effect
Field Airway Management Details
First Transferring Hospital Name
Destination Facility (after transfer from 1st Referring)
Second Transferring Hospital Name
Destination Facility (after transfer from 2nd Referring)
ED/Hospital Initial GCS - Verbal Response
ED/Hospital Initial GCS - Motor Response
Intubation Status at Time of ED/Hospital Vitals
Paralytic Agent in Effect in ED/Hospital
Temperature Route
Drug Use Indicator
Final Outcome
Hospital Complications
LEVEL I ONLY: AIS 2005 picklist upgrade - AIS Six Digit Injury Identifier(s)
Primary Method of Payment
Secondary Method of Payment

DIAGNOSIS / ISS CHANGES:

Only Level I facilities are required to submit the AIS 6 digit injury identifiers and the corresponding Severity Value and Body Region. 2008 changes to Diagnosis section:

-Severity Value (separate values for AIS and ICD9 codes)
-Body Part Injured (separate values for AIS and ICD9 codes)
-Injury Severity Score (separate ISS calculations for ICD9 and AIS codes)

OTHER IMPORTANT CHANGES NOT LISTED ABOVE:*

1. ED LOS calculation change (In old ASTR system 30 minutes and under = 0 hours. In new system, any stay less than 1 hr should round up to 1 hr.)
2. Change in the definition of a 1st and 2nd Referring Facility
3. 1st Referring Facility LOS (Hrs) (change in calculation: any stay less than 1 hr rounds up to 1 hr)
4. 2nd Referring Facility LOS (Hrs) (change in calculation: any stay less than 1 hr rounds up to 1 hr)
5. Total ICU LOS definition clarified to match the new NTDS instructions
6. Probability of Survival will be calculated using the ICD-9-CM ISS score (because ICD9 codes are available from all facilities)
7. ASTR-suggested updates to database field prompts and screen titles - to better clarify required data to be captured (Individual hospitals will determine how closely their field prompts and titles are to match ASTR system.)
8. Any data links / interfacing will need to be addressed by your individual hospital.

*****Note: Depending on the unique customization of your hospital's database, there may be additional changes required in order for your system to match the 2008 ASTR required specifications.